REMARKS

INTERVIEW SUMMARY

Applicant acknowledges the telephone interview of July 19, 2007, in which were discussed claim 1 and *Hayes*.

At that interview, the Examiner explained that the limitation of an atraumatic light-coupler in contact with the fiber was insufficient to distinguish *Hayes*. In particular, the Examiner explained that she regarded the *Hayes* atraumatic light-coupler to be met by the union of the transparent shield and the air that filled the space proximal to the shield. Since the optical fiber was "in contact" with this air, it followed that *Hayes* disclosed a fiber "in contact" with the light coupler.

Applicant registered disagreement with the propriety of considering a void to be a structural element. However, Applicant agreed to consider a claim amendment to distinguish the claim.

CLAIM AMENDMENT

Because blood interacts with infrared radiation, it is desirable to avoid having any blood on the path between the fibers and the arterial wall. Applicant's device excludes blood from the path by maintaining contact between the atraumatic coupler and the arterial wall. This is achieved by providing a probe that resiliently urges the atraumatic coupler against the wall. Applicant amends the claims to recite a probe having the foregoing property.

Applicant notes that claim 6, which recites similar subject matter, has been rejected as being rendered obvious by the combination of *Hayes* and *Hammerslag*. In an effort to expedite prosecution, Applicant points out the following distinction between the claimed invention and the combination of references.

HAMMERSLAG

As best understood, the Examiner regards *Hammerslag* as resiliently assuming a preferred shape because the coil wire of *Hammerslag* has a tendency to straighten the distal portion of the *Hammerslag* probe. To operate the *Hammerslag* probe, the surgeon pulls on the deflection wires **52** (see FIG. 3) to bend the "steering region" **46** of the probe.

As a threshold matter, *Hammerslag* does not actually state that the steering region **46** has a tendency to remain straight. This is, in fact, an assumption based on everyday experience with helical springs. However, not every coil of wire behaves as a helical spring.

Notwithstanding the foregoing assumption, Applicant amends the claim to requires not only that the probe assume a preferred shape, but also that the atraumatic light coupler be "disposed to atraumatically contact the intraluminal wall when the probe resiliently assumes the preferred shape."

To the extent *Hammerslag's* probe has a preferred shape, that shape is straight. Thus, if one were to combine *Hammerslag* with *Hayes*, the result would be an atraumatic light coupler that tends to point straight ahead when the steering region **46** assumes its preferred shape. This is different from claim 1, in which the atraumatic coupler contacts the wall when the probe assumes its preferred shape.

The above distinction is a distinction with a difference. To the extent that the atraumatic coupler points straight ahead, there will be blood along the path extending from the fibers to the wall. This blood will tend to scatter and absorb light, which in turn will interfere with any measurements.

In contrast, in the device recited in claim 1, one the resilient probe urges the coupler against the wall, there is no blood on the path extending between the fibers and the wall. As a result, light can freely travel between the fibers and the wall without being scattered by any intervening blood.

Another distinction is that if one were to use he combination of *Hayes* and *Hammerslag*, a surgeon would have to pull on a deflection wire **52** for the entire scanning procedure to maintain contact between the tip of the probe and the arterial wall. In doing so, the surgeon may have difficulty pulling on the wire with the appropriate amount of force at all times. If the force is too weak, the tip will lift off the wall and blood will fill the gap, interfering with the measurement. If the force is too strong, the atraumatic tip may inflict damage.

In contrast, Applicant's claimed invention maintains a substantially constant radial force as it glides along the surface of the arterial wall. It does so without drawing on the surgeon's attention to carry out the function.

Summary

In view of the foregoing remarks, the proposed amendment is believed to place the claims in condition for allowance. Accordingly, entry of the amendment is proper.

Now pending in this application are claims 1-5, 7-13, 20-21, 43-44, 46-51, and 53-61. Claims 1, 43, and 46 are independent. No fees are believed to be due with the filing of this request for reconsideration. However, to the extent fees are due, or a refund is forthcoming, please adjust our deposit account number 06-1050, referencing Attorney Docket 12258-029001.

Respectfully submitted,

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Faustino A. Lichauco
Reg. No. 41,942

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110
Telephone: (617) 542-5070
Facsimile: (617) 542-8906
21702342.doc